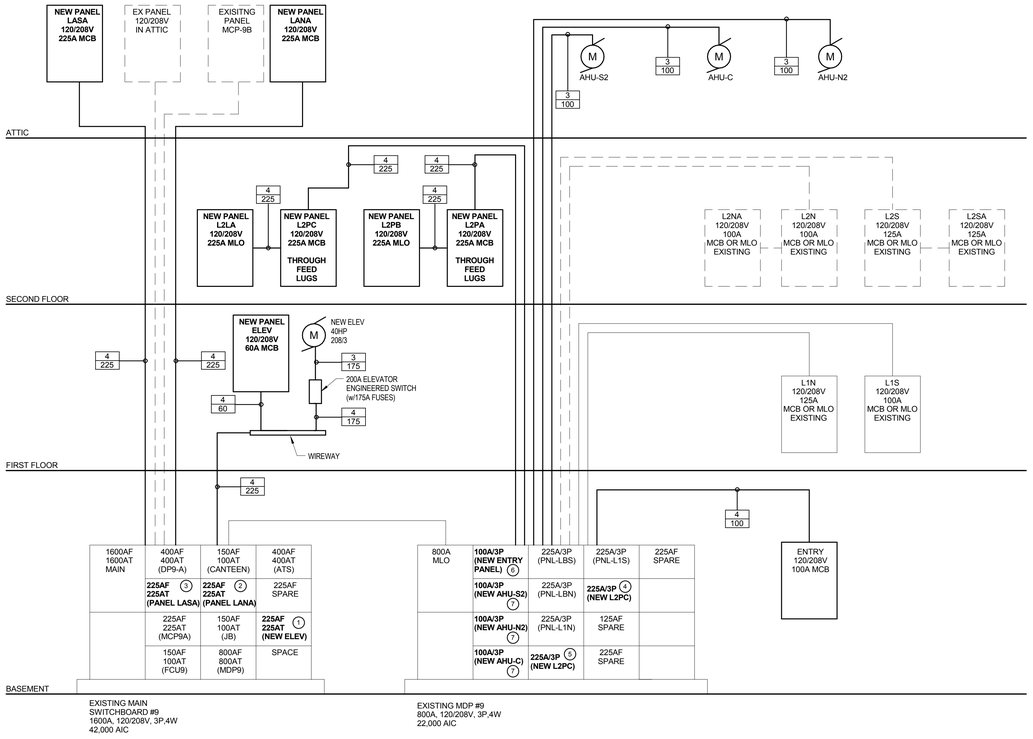


## 1 BUILDING ELECTRICAL RISER - DEMO AND NEW WORK

SCALE = NTS

## NUMBERED NOTES (This Detail)

1. PROVIDE A 175A-3P CIRCUIT BREAKER MATCHING EXISTING AIC RATING IN EXISTING SPACE IN SWITCHBOARD #9 FOR POWER FEED TO NEW ELEVATOR.
2. REUSE EXISTING 225A-3P CIRCUIT BREAKER FOR FEED TO NEW PANEL 'LANA' IN ATTIC.
3. REUSE EXISTING 225A-3P SPARE CIRCUIT BREAKER FOR FEED TO NEW PANEL 'LASA' IN ATTIC.
4. REUSE EXISTING 225A-3P SPARE CIRCUIT BREAKER FOR FEED TO NEW PANEL 'L2PA' IN ATTIC.
5. REUSE EXISTING 225A-3P SPARE CIRCUIT BREAKER FOR FEED TO NEW PANEL 'L2PC' IN ATTIC.
6. REUSE EXISTING 100A-3P SPARE CIRCUIT BREAKER FOR FEED TO NEW PANEL 'ENTRY' IN NEW HOLDING ROOM.
7. REUSE EXISTING 100A-3P SPARE CIRCUIT BREAKER FOR FEED TO NEW AHU.

## LINETYPE LEGEND

- NEW
- DEMO
- EXISTING

## ELECTRICAL FEEDER SCHEDULE

| 3 | | 4 | |
|---|---|---|---|
| AMPS | 3PH, 3W, & GROUND | AMPS | 3PH, 4W, & GROUND |
| 15 | (3) #12 & 1#12 G IN 3/4" C | 15 | (4) #12 & 1#12 G IN 3/4" C |
| 20 | (3) #12 & 1#12 G IN 3/4" C | 20 | (4) #12 & 1#12 G IN 3/4" C |
| 25 | (3) #10 & 1#10 G IN 3/4" C | 25 | (4) #10 & 1#10 G IN 3/4" C |
| 30 | (3) #10 & 1#10 G IN 3/4" C | 30 | (4) #10 & 1#10 G IN 3/4" C |
| 35 | (3) #8 & 1#10 G IN 3/4" C | 35 | (4) #8 & 1#10 G IN 3/4" C |
| 40 | (3) #8 & 1#10 G IN 3/4" C | 40 | (4) #8 & 1#10 G IN 3/4" C |
| 45 | (3) #6 & 1#10 G IN 3/4" C | 45 | (4) #6 & 1#10 G IN 1" C |
| 50 | (3) #6 & 1#10 G IN 1" C | 50 | (4) #6 & 1#10 G IN 1" C |
| 60 | (3) #4 & 1#10 G IN 1" C | 60 | (4) #4 & 1#10 G IN 1 1/4" C |
| 70 | (3) #4 & 1#8 G IN 1 1/4" C | 70 | (4) #4 & 1#8 G IN 1 1/4" C |
| 80 | (3) #3 & 1#8 G IN 1 1/4" C | 80 | (4) #3 & 1#8 G IN 1 1/4" C |
| 90 | (3) #2 & 1#8 G IN 1 1/4" C | 90 | (4) #2 & 1#8 G IN 1 1/4" C |
| 100 | (3) #1 & 1#8 G IN 1 1/2" C | 100 | (4) #1 & 1#8 G IN 1 1/2" C |
| 125 | (3) #1 & 1#6 G IN 1 1/2" C | 125 | (4) #1 & 1#6 G IN 1 1/2" C |
| 150 | (3) #1/0 & 1#6 G IN 1 1/2" C | 150 | (4) #1/0 & 1#6 G IN 1 1/2" C |
| 175 | (3) #2/0 & 1#6 G IN 2" C | 175 | (4) #2/0 & 1#6 G IN 2" C |
| 200 | (3) #3/0 & 1#6 G IN 2" C | 200 | (4) #3/0 & 1#6 G IN 2" C |
| 225 | (3) #4/0 & 1#4 G IN 2" C | 225 | (4) #4/0 & 1#4 G IN 2" C |
| 250 | (3) #250 KCMIL & 1#4 G IN 2 1/2" C | 250 | (4) #250 KCMIL & 1#4 G IN 2 1/2" C |
| 300 | (3) #350 KCMIL & 1#4 G IN 2 1/2" C | 300 | (4) #350 KCMIL & 1#4 G IN 2 1/2" C |
| 350 | (3) #500 KCMIL & 1#3 G IN 3" C | 350 | (4) #500 KCMIL & 1#3 G IN 3" C |
| 400 | (3) #500 KCMIL & 1#3 G IN 3" C | 400 | (4) #500 KCMIL & 1#3 G IN 3" C |
| 450 | 2 SETS OF (3) #4/0 & 1#2 G IN 2" C | 450 | 2 SETS OF (4) #4/0 & 1#2 G IN 2 1/2" C |
| 500 | 2 SETS OF (3) #250 KCMIL 1#2 G IN 2 1/2" C | 500 | 2 SETS OF (4) #250 KCMIL 1#2 G IN 3" C |
| 600 | 2 SETS OF (3) #350 KCMIL & 1#1 G IN 3" C | 600 | 2 SETS OF (4) #350 KCMIL & 1#1 G IN 3" C |
| 800 | 2 SETS OF (3) #500 KCMIL & 1#1/0 G IN 3" C | 800 | 2 SETS OF (4) #500 KCMIL & 1#1/0 G IN 3 1/2" C |
| 900 | 3 SETS OF (3) #350 KCMIL & 1#2/0 G IN 3" C | 900 | 3 SETS OF (4) #350 KCMIL & 1#2/0 G IN 3" C |
| 1000 | 3 SETS OF (3) #500 KCMIL & 1#2/0 G IN 3" C | 1000 | 3 SETS OF (4) #500 KCMIL & 1#2/0 G IN 3 1/2" C |
| 1200 | 4 SETS OF (3) #350 KCMIL & 1#3/0 G IN 3" C | 1200 | 4 SETS OF (4) #350 KCMIL & 1#3/0 G IN 3" C |
| 1600 | 5 SETS OF (3) #500 KCMIL & 1#4/0 G IN 3" C | 1600 | 5 SETS OF (4) #500 KCMIL & 1#4/0 G IN 3 1/2" C |
| 2000 | 6 SETS OF (3) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C | 2000 | 6 SETS OF (4) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C |
| 2500 | 7 SETS OF (3) #500 KCMIL & 1#350 KCMIL G IN 3 1/2" C | 2500 | 7 SETS OF (4) #500 KCMIL & 1#350 KCMIL G IN 3 1/2" C |
| 3000 | 8 SETS OF (3) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C | 3000 | 8 SETS OF (4) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C |
| 3500 | 10 SETS OF (3) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C | 3500 | 10 SETS OF (4) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C |
| 4000 | 11 SETS OF (3) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C | 4000 | 11 SETS OF (4) #500 KCMIL & 1#500 KCMIL G IN 3 1/2" C |

**NOTES:**
1. CONDUIT SIZES FOR THIN/THWN COPPER CONDUCTORS ONLY. OTHER CONDUCTOR TYPES MAY REQUIRE INCREASED CONDUIT SIZE.
2. GROUND CONDUCTORS SPECIFIED IS FOR EQUIPMENT GROUND PER N.E.C. UNLESS NOTED OTHERWISE.

1 TOP NUMBER REFERS TO COLUMNS
800 BOTTOM NUMBER REFERS TO ROWS (AMPS)

**MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE**

| TAG | DESCRIPTION | MOCP | VOLTS/PHASE | FLA | HP | MCA | WATTS | NOTES |
|---|---|---|---|---|---|---|---|---|
| AHU-S1.1 | AHU SUPPLY FAN | 40A | 208/3 | --- | --- | 21.9 | --- | 5 |
| AHU-S1.2 | AHU EXHAUST FAN | 20A | 208/3 | --- | --- | 8.6 | --- | 5 |
| AHU-S1.3 | AHU ENERGY RECOVERY WHEEL | 20A | 120/1 | --- | --- | 2.4 | --- | 4 |
| AHU-N1.1 | AHU SUPPLY FAN | 50A | 208/3 | --- | --- | 31.6 | --- | 5 |
| AHU-N1.2 | AHU EXHAUST FAN | 20A | 208/3 | --- | --- | 8.6 | --- | 5 |
| AHU-N1.3 | AHU ENERGY RECOVERY WHEEL | 20A | 120/1 | --- | --- | 2.4 | --- | 4 |
| AHU-S2 | AIR HANDLING UNIT | 100A | 208/3 | --- | --- | 60.4 | --- | 5 |
| AHU-C | AIR HANDLING UNIT | 100A | 208/3 | --- | --- | 60.4 | --- | 5 |
| AHU-N2 | AIR HANDLING UNIT | 100A | 208/3 | --- | --- | 60.4 | --- | 5 |
| ERU-S2 | ENERGY RECOVERY UNIT | 20A | 208/3 | --- | --- | 8.6 | --- | 5 |
| ERU-C | ENERGY RECOVERY UNIT | 20A | 208/3 | --- | --- | 8.6 | --- | 5 |
| ERU-N2 | ENERGY RECOVERY UNIT | 20A | 208/3 | --- | --- | 8.6 | --- | 5 |
| RF-S2 | RELIEF FAN | 30A | 208/3 | --- | 5 | --- | --- | 5 |
| RF-C | RELIEF FAN | 30A | 208/3 | --- | 5 | --- | --- | 5 |
| RF-N2 | RELIEF FAN | 30A | 208/3 | --- | 5 | --- | --- | 5 |
| CUH-1 | CABINET UNIT HEATER | 20A | 120/1 | --- | --- | 1.3 | --- | 3 |
| CUH-2 | CABINET UNIT HEATER | 20A | 120/1 | --- | --- | 1.3 | --- | 3 |
| UH-1 | UNIT HEATER | 20A | 120/1 | --- | --- | 0.8 | --- | 3 |
| CU-1 | CONDENSING UNIT | 30A | 208/1 | --- | --- | 19.5 | --- | 3 |
| AC-1 | SPLIT SYSTEM | PROVIDE (2) #12 & #12 GRD FROM CU-1 TO AC-1 FOR CONTROL WIRING | | | | | | |

NOTES:
1. COORDINATE CONNECTIONS WITH ACTUAL UNIT PROVIDED.
2. REFER TO MECHANICAL EQUIPMENT SCHEDULES ON H SERIES DRAWINGS.
3. UNIT SHALL BE HAVE INTEGRAL DISCONNECT SWITCH (SUPPLIED BY H.C. AND WIRED BY E.C.)
4. UNIT SHALL HAVE EXTERNAL DISCONNECT SWITCH (SUPPLIED AND INSTALLED BY E.C.)
5. UNIT SHALL HAVE VFD (SUPPLIED BY H.C. AND INSTALLED BY E.C.), REFER TO H SERIES DRAWINGS FOR LOCATION OF VFD'S.

NORTH

FULLY SPRINKLERED
BID DOCUMENTS

| Revisions: | Date |
|---|---|
| | |

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www.ae-works.com

**Drawing Title:** ELECTRICAL RISER DIAGRAM & SCHEDULES

**Approved: Project Director**

**Project Title:** BUILDING 9 - SECOND FLOOR RENOVATION

**Location:** 1400 Blackhorse Hill Road Coatesville, PA 19320

**Date:** 05 / 12 / 14 | **Checked:** JJD | **Drawn:** JMZ

**Project Number:** 542-13-105

**Building Number:** 9

**Drawing Number:** E500

**Dwg.** 111 **of** 125

**Office of Construction and Facilities Management**

Department of Veterans Affairs

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